

California Department of Pesticide Regulation

Completed Risk Assessments

(as of February, 2007)

The California Department of Pesticide Regulation (DPR) conducts risk assessment to evaluate the toxicity of a pesticide and the likelihood that the use of that pesticide will result in adverse health effects in people. There are a number of reasons why a risk assessment is initiated. These include assessing the significance of potential adverse effects in toxicology data submitted under the Birth Defect Prevention Act (SB 950), the emergency use of a currently registered pesticide, concerns regarding dietary exposure (AB 2161) or exposure in ambient air (AB 1807) (*see footnotes for legislation references*). Another important factor in the risk assessment is the availability of evaluation tools such as dietary assessment programs and probabilistic analysis, and the availability of relevant data such as dietary, residue and air monitoring data.

To the extent possible, DPR conducts a single comprehensive risk assessment on an active ingredient, considering all appropriate exposure routes (e.g., oral, inhalation, dermal) and exposure scenarios (e.g., residential, industrial, bystander, ambient air, and drinking water). Exceptions would be when a risk assessment is conducted for a Section 5, Section 18 or Section 24(c) registration (*see footnotes for definitions*) or for dietary or inhalation exposure only.

Dates represent the date the risk assessment was completed by DPR scientific staff, but before the risk assessment was formally approved by DPR management. Some documents also include revision dates; a risk assessment may be modified for a number of reasons, including review of new data or changes in use patterns that affect exposure (and therefore, risk).

To obtain copies: Risk assessments are prepared in the form of a risk characterization document (RCD). Many RCDs (especially those completed after 1993) are available for downloading (<http://www.cdpr.ca.gov/docs/risk/rcd.htm>). For paper copies of RCDs, send a mail or email request to: Public Records Request, Pesticide Registration Branch, California Department of Pesticide Regulation, P.O. Box 4015, Sacramento, CA 95812, publicrecords@cdpr.ca.gov. (A nominal copying fee will be charged, based on the number of pages, payable in advance.)

RCDs are not available to the public until finalized, that is, after peer reviews have been completed and the RCD is approved by DPR management. Please note that not all risk assessments listed below have been approved by DPR management.)

Pesticide Active Ingredient	Date Completed	Comments
1,3-dichloropropene (Telone)	1/14/97	
Abamectin	5/15/87 for greenhouses	Additional documents include cotton, lettuce, celery and strawberries (1990), pears (1991), celery (1/21/92) and residential use (12/9/92 and 8/12/93)
Alachlor	4/20/89	
Amitraz	12/12/95	
Amitrole	12/28/89	
Atrazine	4/4/03	
Azafenidin	10/12/00	
Azinphos-methyl	1/25/96 and 2/26/04	Revised 4/29/98 and 5/28/02; ambient air, 11/15/99 and 6/12/03 ^a
Benomyl	9/14/99	
Bensulfuron methyl	4/20/89	Rice (1989); Dietary exposure (5/7/92) ^b
Bifenthrin	2/22/91 (cotton); 3/5/97 (greenhouse, termiticide)	Additional documents on melons (8/20/91), tomatoes (3/13/92)
Captafol ^c	1/26/88	
Carbofuran	1/23/06	
Carfentrazone-ethyl	4/20/98	Rice
Chlorothalonil	9/8/04	Dietary only ^b
Chlorpyrifos	5/8/92	Dietary only ^b ; 2001 draft currently in revision
Clofentazine	4/9/91	For pears
Cyanazine	6/30/97	
Cycloate	12/8/95	
Cyhalofop-butyl	4/6/01	Section 18 for rice
Cyhexatin	6/23/87	
Cyromazine	3/24/93	For poultry houses
DEET	5/23/00	
DEF	10/3/98 and 3/12/04	Ambient air, 4/13/99 ^a , revision, 10/3/02
Deltamethrin	6/13/00	
Diazinon	10/5/94	Mediterranean fruit fly
Dichlorvos (DDVP)	1/8/96	Addendum I, 11/4/97; addendum II, 11/20/98
Diiflubenzuron (Dimilin)	5/1/87	
Diquat	12/7/95	Dietary only, 9/7/92 ^b
EPTC	7/10/96	
Ethoprop	7/10/96	
Ethyl parathion	6/10/88	Ambient air ^a + listing doc. (2/19/92)
Fenamiphos	4/1/92,	Broccoli and cauliflower + 1 revision (10/31/97)
Fenoxaprop-ethyl	4/25/94	For rice + 1 revision for non-food use (5/20/96)
Fenpropathrin	6/15/94	Cotton and greenhouse; tomatoes (3/25/92); broccoli and cauliflower (4/1/92)
Fenthion	11/30/01	

Pesticide Active Ingredient	Date Completed	Comments
Flutolanil	10/15/90	Non-food use
Folpet	1/10/89	
Fosetyl-al (Aliette)	3/21/91	For lettuce and spinach
Hydramethylnon	1/20/04	
Hydrogen cyanamide	11/6/90	For grapes + 1 revision including non-food use (12/1/93)
Imidacloprid	6/24/93; dietary 2/9/06	For cotton only
Isofenphos	2/19/91	Non-food uses
Malathion	7/31/87 (for Medit. fruit fly); dietary 2/4/93 ^b	
Metalaxyl	2/21/91	For strawberries
Metam sodium	11/17/03 + 7/21/04	
Metam/MITC	5/13/98 and 10/9/03	Ambient air, 2/1/00, 9/24/01, 8/26/02 and 2/20/04 ^a
Methamidophos	6/27/05	Dietary only ^b
Methidathion	10/3/03	Dietary only, 7/10/00; addendum for ambient air, 7/15/04 and 1/11/07
Methyl bromide, oral route	2/21/02	Sweet potatoes only, 2/4/92
Methyl bromide, aggregate	1/8/03	
Methyl bromide, inhalation	6/14/02	
Methyl parathion	7/14/03	Ambient air, 9/16/99 ^a ; Dietary only, 2/10/05 ^b
Mevinphos	6/30/94	
MITC	5/13/98, + revision (10/9/03)	Ambient air, 2/1/00, 9/24/01, 8/26/02 and 2/20/04 ^a
Molinate	3/5/96	
Monocrotophos ^c	7/1/89	
Myclobutanil	8/4/00	Strawberries, asparagus
Naled	11/11/99 + 1 addendum (7/12/02)	
Paclobutrazol	8/1/93	Non-food uses
Pendamethalin	2/17/99	Citrus
Pentachlorophenol	6/9/98	
Permethrin	5/9/94	Tick/clothing
Phosmet (Imidan)	8/23/88	Apple maggot
Propiconazole	12/23/91 and 1/30/97	Mums (1991) and almonds (1997)
Propargite	10/4/04	Dietary only ^b
Propetamphos	3/26/99	

Pesticide Active Ingredient	Date Completed	Comments
Propoxur	2/6/97	
Rimsulfuron	10/21/97	Tomatoes
Sulfuryl fluoride (Vikane), inhalation	8/26/04	Ambient air, 6/1/05 ^a ; as TAC, 9/06
Thiabendazole	8/10/01	
Tralomethrin	1/4/96	
Triademefon (Bayleton)	5/14/91	Artichokes and tomatoes (1991), artichokes (2/7/92), FQPA/artichokes (3/21/97)

^a Ambient air refers to evaluation of an active ingredient under AB 1807 (see below)

^b Dietary only refers to evaluation of an active ingredient under AB 2161 (see below)

^c No longer registered in California.

Pesticide active ingredient: An active ingredient is the substance that prevents, destroys, repels, or mitigates the target pests, or which functions as a plant growth regulator, desiccant or defoliant. Pesticides are regulated primarily on the basis of their active ingredients. A pesticide product is formulated by combining one or more active ingredients with one or more other (nonpesticidal) ingredients.

SB 950: Senate Bill 950, the Birth Defect Prevention Act of 1984, required that all registered pesticides have complete and adequate chronic health effects studies on file, and that DPR use these and other data to determine if a pesticide would cause significant adverse effects.

AB 2161: Assembly Bill 2161, the Food Safety Act of 1989. Among its mandates was a requirement for DPR to assess risk of dietary exposure to pesticides in both raw and processed foods.

AB 1807: Assembly Bill 1807, 1983 legislation also known as the Toxic Air Contaminant (TAC) Act, focuses on the evaluation and control of pollutants in ambient community air.

Full Registration: Before 1996, DPR conducted risk assessments on all new active ingredients before registration. In 1996, DPR instituted a new policy integrating its risk assessment tracks. U.S. EPA extensively reviews new pesticide active ingredients before federal registration, using up-to-date toxicology data. On that basis, DPR policy was changed to allow a new active ingredient to be registered in California after an evaluation of its toxicology but without a risk assessment, providing all required data have been submitted. The newly registered active ingredient is then prioritized for risk assessment.

Sec. 5, 18, 24(c): Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Section 5 authorizes issuance of experimental use permits. FIFRA Section 18 authorizes issuance of emergency exemptions from registration. FIFRA Section 24(c) authorizes states to issue Special Local Need (SLN) registrations. Risk assessments conducted for these purposes only address those limited uses.

Active Ingredients with Final Draft RCD/Comments Received/ Responses Pending (2/2007):

Endosulfan, ortho-phenylphenol